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| 1 | Start a new project and delete the Cat sprite | |
| 2 | Click the **Stage** and select the **Backdrops** tab |  |
| 3 | Select the *winter-lights* background |  |
| 4 | Click the **paintbrush** icon next to the word **New sprite:**  We aren’t going to do anything with this sprite except rename to *GameLoop* |  |
| 5 | Click the **paintbrush** icon next to the word **New sprite:**  Draw a black circle and use the **fill with colour** tool to fill the shape white.  (Tip: when drawing a circle, hold shift to make it perfectly proportional!)  Rename this sprite to *Snowball* |  |
|  | Duplicate your *Snowball* sprite and rename to *Snowman* and go to the **Costumes** tab. |  |

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| 6 | Now get your drawing skills ready as we’re going to draw lots of snowman costumes!   1. Duplicate the first costume (the one we used for the Snowball) 2. Use the **Select and Duplicate** tool to make a copy of the Snowball. Make it a little smaller and put it roughly on top of the other snowball |  |
| 8 | Duplicate the previous costume for a third costume.  This time click the **Add** button and select *scarf1.*  Place this scarf on the Snowman. |  |
| 9 | Duplicate the previous costume and add a ball for a head. |  |
|  | Continue duplicating every time you make a new feature for your snowman. Eventually you will have around 11 costumes |  |

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| 11 | Time to code!  Select your *GameLoop* sprite and place the following code blocks. This will control when our game starts and what happens at the end. |  |
| 12 | Select the *Snowball* sprite and place the following code blocks. This will:   * Place our snowball in a starting position and hide when the game starts * Listen for the space key to be pressed, and make a clone when it is   We’re using clones for our snowballs to make many snowballs without needing many snowball sprites. |  |
| 13 | Still on the *Snowball* sprite, place the following code blocks. This will make our clone:   * Appear! * Point towards the where the mouse is pointing * Move until it either hits the edge or a *Snowman* sprite * Delete itself   It is important to delete clones when you’re finished with them. Too many clones makes a slow game! |  |

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| 14 | Select the *Snowman* sprite. Place the following code blocks. This will make the *Snowman*:   * Hide when the game starts * Pick a random place on the stage * Create a clone of the *Snowman* * Wait between 2-4 seconds before looping again | |
| 16 | Still on *Snowman*, we need to code the snowman clone’s behaviour. Place the following code blocks. This is a complicated block so let’s break it down:   * When the snowman starts as a clone, push him back 999 layers. This means that the snowman will start “behind” any snowman already on the stage * We set the size of the clone to 40% (depending on the size of your size, it may need different value) * Appear! * Change to his “full” costume (fully drawn snowman – in my case *costume11*) * Repeat until he reaches just the snowball costume (in my case *costume1*) * Keep moving down the screen and getting bigger * If the *Snowman* sprite is touching the *Snowball* sprite, then we go back one costume (to a little bit less of the snowman), we also move back and stay the same size * If the *Snowman* is a certain size (I picked 185 but you may pick a different number) then say something and tell the other sprites (the *GameLoop)* that the game is over. * If we have reached the costume with just the snowball, wait half second and then delete this clone |  |